170864

113

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

Date: **March 5, 1991**

Subject: Biological Technical Assistance Group Recommendations Concerning American Chemical Services Site From March 5, 1991 Meeting

From: Douglas Beltman, Ecologist, BTAG Co-coordinator
Technical Support Unit

To: Robert Swale, RPM
IL/IN Unit #2

The Region V Biological Technical Assistance Group (BTAG) held a meeting on March 5, 1991 to discuss the January, 1991 Draft Ecological Risk Assessment prepared for the American Chemical Services Superfund site. A meeting attendance list is attached.

BTAG discussed the quality and usefulness of the risk assessment. In general, we found this to be a poor risk assessment that does not adequately assess potential ecological risks associated with the site. Some specific criticisms of the risk assessment are:

1) Potential ecological receptors are not adequately defined. Little site-specific information on plant and animal species on and near the site is provided. The assertion that fish are not a concern because of limited aquatic habitat was challenged by U.S. Fish and Wildlife personnel who have visited the site and the adjacent wetlands. The statement that habitat for threatened and endangered species is no longer available in the vicinity due to landscape modifications is contradicted by the presence of the relatively extensive wetlands surrounding the site.

2) The potential for bioaccumulation of contaminants is largely ignored. Only plant uptake of organics appears to have been considered, and this pathway was summarily dismissed with sweeping, unsubstantiated generalizations. PCB and metal uptake was not addressed, nor was direct contaminant uptake by fish, macroinvertebrates, or mammals.

3) Exposure to terrestrial plant and animal receptors is not addressed.

4) Comparison of surface water contaminant levels with only acute LC50 values for a few species of fish from one literature source is not adequate. A comparison with chronic Lowest Observed Effect Levels and No Observed Effect Levels for a variety of fish and invertebrate species from numerous sources should be conducted.

5) Using the Equilibrium Partitioning method to derive site-specific sediment criteria

omits metals and polar organic compounds from consideration. Also, for compounds without AWQC, derived pore water concentrations should be compared to chronic toxicity levels for a variety of aquatic organisms.

6) Possible additive or synergistic ecological effects of contaminants are not considered at all in the general approach used in this risk assessment. Although estimating these effects involves large degrees of uncertainty, some qualitative assessment of these effects should be included.

Thank you for the opportunity to review this ecological risk assessment. We hope our comments will help ensure a more adequate risk assessment in the future. If you have any questions about these comments, please call me at 6-5902.

cc: BTAG members

BTAG 3/5/91

Douglas Beltman	USEPA	6-5902
RONALD ABRANT	WESTON/ESAT	6-2914
Eileen Helmer	USEPA	6-4828
Wayne Gorski	USEPA	6-0140
Nan Gonda	USEPA	3-9236
MARK HUSTON	WESTON/ERT/TAT	908·225·6266
Jen Lumino	USEPA	6-0981
C. Sparks	US FWS	332-4265
Joseph B Smith	US Dept of the Interior	3-1050
Mark O. Sprenger	EPA - ERT	908-906-6826
David Charters	EPA-ERT	908-906-6825
Bob Swale	EPA - Region V	6-5116
Steve Ostrodka	EPA	6-3011
Wayne Fantz (telephone)	IDFAR	
Lee D. Gorsky	USEPA OHEA	3-5598